We claim:

1. A process for producing a water-absorbing polymer, which comprises a base polymer A being mixed with a first aqueous solution B of at least one surface postcrosslinker and a second aqueous solution C of at least one polyvalent cation and thermally treated, wherein said base polymer A is based on at least 50% neutralized acid-functional monomer and said solutions B and C are metered wholly or partly concurrently through separate nozzles.

2. The process of claim 1 wherein said solutions B and C are metered concurrently through separate nozzles.

3. The process of claim 1 or claim 2 wherein said solution B comprises a cosolvent.

4. The process of any of claims 1 to 3 wherein said solution B of said surface postcrosslinker comprises an oxazolidone.

5. The process of any of claims 1 to 4 wherein said solution B comprises at least two mutually distinct surface postcrosslinkers.

6. The process of any of claims 1 to 5 wherein said solution B comprises at least one surface postcrosslinker which is not a polyol and at least one polyol.

7. The process of any of claims 1 to 6 wherein said base polymer A has a deagglomerating assistant added to it.

8. The process of claim 7 wherein said deagglomerating assistant is sorbitan monococoate and/or sorbitan monolaurate.

9. The process of claim 7 or 8 wherein said deagglomerating assistant is added to said aqueous solution B or to said aqueous solution C.

10. The process of any of claims 7 to 9 wherein the deagglomerating assistant is metered such that the surface tension of an aqueous extract of the swollen water-absorbing polymer after addition of said deagglomerating assistant is at least 0.065 N/m.

11. The process of any of claims 1 to 10 wherein the concentration of the at least one surface postcrosslinker in said solution B, based on said solution B, is not more than 30% by weight.

12. The process of any of claims 1 to 11 wherein the concentration of the at least one

surface postcrosslinker on said base polymer A, based on said base polymer A, is in the range from 0.1% by weight to 1% by weight.

13. The process of any of claims 1 to 12 wherein the concentration of the at least one polyvalent cation in said solution C, based on said solution C, is not more than 12% by weight.

14. The process of any of claims 1 to 13 wherein the concentration of the at least one polyvalent cation on said base polymer A, based on said base polymer A, is in the range from 0.001% by weight to 0.5% by weight.

15. The process of any of claims 1 to 14 wherein the concentration of the at least one polyvalent cation on said base polymer A, based on said base polymer A, is in the range from 0.02% by weight to 0.1% by weight.

16. The process of any of claims 1 to 15 wherein the ratio of said solution B to said solution C is in the range from 10:1 to 1:10.

17. The process of any of claims 1 to 16 wherein the total amount of said solutions B and C is in the range from 2.5% to 6.5% by weight, based on said base polymer A.

18. The process of any of claims 1 to 17 wherein said base polymer A is a partially neutralized and crosslinked polyacrylic acid.

19. The process of any of claims 1 to 18 wherein said base polymer A has a pH in the range from 5.6 to 6.2.

20. The process of any of claims 1 to 19 wherein said solutions B and C are sprayed onto said base polymer A and the average diameter of the sprayed drops is in the range from 50 to 100 µm.

21. A water-absorbing polymer obtainable according to a process of claims 1 to 20, said polymer having a saline flow conductivity of not less than 80×10^{-7} cm^3s/g and comprises not less than 80% by weight of particles between 150 and 600 µm in size.

22. The polymer of claim 21 comprising not less than 80% by weight of particles between 150 and 500 µm in size.

23. The polymer of claim 21 or 22 comprising not less than 95% by weight of particles having the preferred size.

24. The polymer of any of claims 21 to 23 having a saline flow conductivity of not less than 100×10^{-7} cm^3s/g.

25. The polymer of any of claims 21 to 24 having a saline flow conductivity of not less than 120×10^{-7} cm^3s/g.

26. The polymer of any of claims 21 to 25 having a centrifuge retention capacity of not less than 24 g/g and an absorbency under load at 4830 Pa of not less than 21 g/g.